APPENDIX I

CLAIM AMENDMENT

Kindly amend the claims as shown on the following listing of the claims.

1. (Original) A compound of the formula Ia or lb

where,

in the formula Ia,

El is O, S, Se, Te, NR, CR₂, PR,

E2, E3 are each CR, N, P,

E4 is N, P,

E5 is-OH, SH, NHR, or OR', SR', NRR',

is NH, PH, or NR', PR',

R⁵, R⁶ are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical,

R¹, R², R³, R⁴ are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group,

- R is hydrogen, a linear, branched or cyclic alkyl radical,
- R' is a linear, branched or cyclic alkyl radical,

where at least one of the groups E5 and E6 contains a hydrogen atom;

in the formula Ib.

the symbols El, E4, E5, E6, R⁵, R⁶, R¹, R², R³, R⁴, R and R' are as defined in formula Ia and

E2' and E3' are each O, S, Se, Te, NR, CR₂, PR.

- 2. (Original) A compound as claimed in claim 1, wherein E1 is S.
- 3. (Currently amended) A compound as claimed in claim 1 or 2, wherein E4 is N.
- 4. (Currently amended) A compound as claimed in <u>claim 1</u> any of claims 1 to 3, wherein E6 is NH.
- 5. (Currently amended) A process for preparing a compound as claimed in claim 1 any of elaims 1 to 4, which comprises reacting a compound of the formula IIa or IIb with a compound of the formula III to form a compound of the formula IVa or IVb (step a)) and subsequently reducing the compound of the formula IVa or IVb to give a compound of the formula Ia or Ib (step b)):

a)
$$E_{\bullet} = E_{\bullet} = E$$

where

El is O, S, Se, Te, NR, CR₂, PR, preferably S,

E2, E3 are each CR, N, P,

E2', E3' are each O, S, Se, Te, NR, CR₂, PR,

E4 is N, P, preferably N,

is OH, SH, NHR, of OR', SR', or NRR',

is NH, PH, preferably NH, or NR', <u>or</u> PR',

R⁵, R⁶ are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical,

R¹, R², R³, R⁴ are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group,

R is hydrogen, a linear, branched or cyclic alkyl radical,

R' is a linear, branched or cyclic alkyl radical, where at least one of the groups E5 and E6 contains a hydrogen atom.

- 6. (Currently amended) A metal complex comprising The use of a compound as claimed in claim 1 any of claims 1 to 4 for preparing metal complexes.
- 7. (Currently amended) A metal complex of the formula V

$$L_xMR_y^yY_z$$
 (V)

where

L is a monoanionic or dianionic ligand derived from a compound of the formula Ia or Ib as claimed in claim 1 any of claims 1 to 4,

where,

- in the case of a dianionic ligand,
- E5 is O', S', RN', preferably O', and
- E6 is N, P, preferably N,

and, in the case of a monoanionic ligand,

either

- E5 is O', S', RN', preferably O', and
- E6 is NR, PR

or

E5 is OR, SR, NRR', and

E6 is N, P, preferably N,

and the further symbols E1, E2, E2', E3, E3', E4, R⁵, R⁶, R¹, R², R³, R⁴, R and R' in the formulae I and II have the same meanings as forth for the corresponding symbols in claim 1 any of claims 1 to 4;

and, when L is a dianionic ligand,

M is Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, preferably Ti, Zr, Hf,

R" is hydrogen, a hydrocarbon radical, preferably a linear, branched or cyclic alkyl radical, NR", OR", halogen, acetylacetonate, preferably halogen, OR", where R" is hydrogen or a linear, branched or cyclic alkyl radical,

Y is a Lewis acid,

x is 1 or 2, preferably 1,

y is from 1 to 4, preferably 2,

z is from 0 to 2, preferably 0

where R" and Y may be joined to form a joint radical and 2x + y corresponds to the valence of M;

or, when L is a monoanionic ligand,

M is Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Ni, Pd, Co, Fe, Cu, Ru, Rh, preferably

Ti, Zr, Hf, Ni, Pd,

R" is hydrogen, a hydrocarbon radical, preferably a linear, branched or cyclic alkyl radical, NR"2, OR", halogen, acetylacetonate, preferably halogen,

- OR", where R" is hydrogen or a linear, branched or cyclic alkyl radical,
- Y is a Lewis acid, .
- x is 1, 2 or 3,
- y is from 1 to 4,
- z is from 0 to 2, preferably 0,

where R" and Y may be joined to form a joint radical and x + y corresponds to the valence of M.

- 8. (Original) A metal complex as claimed in claim 7, wherein the ligand L is a dianionic ligand and M is Ti, Zr or Hf.
- 9. (Original) A metal complex as claimed in claim 8, wherein x is 1, y is 2 and z is 0.
- 10. (Original) A metal complex as claimed in claim 7, wherein the ligand L is a monoanionic ligand and M is Ti, Zr, Hf, Ni or Pd.
- 11. (Original) A metal complex as claimed in claim 10, wherein when M is Ti, Zr, Hf,

 x is 2, y is 2 and z is 0 or x is 1, y is 3 and z is 0 and when M is Ni or Pd, x is 1, y
 is 1 and z is 0.
- 12. (Currently amended) A process for preparing a metal complex as claimed in <u>claim</u>

 7 any of claims 7 to 11 by deprotonation of a compound of formula Ia or Ib as

 claimed in any of claims 1 to 4 by means of a base and subsequent reaction with a

metal compound, or

by direct reaction of a compound of formula Ia or Ib as claimed in any of claims 1 to 4 with a metal compound,

where the metal compound comprises a metal M selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W, preferably Ti, Zr, Hf, when L is a dianionic ligand, or a metal M selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Ni, Pd, Co, Fe, Cu, Ru and Rh, preferably Ti, Zr, Hf, Ni, Pd, when L is a monoanionic ligand.

- 13. (Currently amended) A catalytically active composition comprising
 - a metal complex of the formula V as claimed in <u>claim 7 any of claims 7 to</u>
 11 as component A,
 - b) at least one compound, as component B, selected from the group consisting of
 - (b1) an organometallic compound, as component B1,
 - (b2) an organoaluminum oxy compound, as component B2, and
 - (b3) a compound which reacts with the metal complex to form an ion pair, as component B3.
- 14. (Original) A catalytically active composition as claimed in claim 13 which further comprises a support material (component C) in addition to the components A and B.

- 15. (Currently amended) A process for preparing a catalytically active composition as claimed in claim 13 or 14, which comprises bringing a metal complex of the formula V-as claimed in any of claims 7 to 11 (component A) into contact with a compound (component B) selected from the group consisting of
 - (b1) an organometallic compound, as component B1,
 - (b2) an organoaluminum oxy compound, as component B2, and
 - (b3) a compound which reacts with the metal complex to form an ion pair, as component B3,

and optionally a support material (component C).

- 16. (Currently amended) The use of a catalytically active composition as claimed in claim 13 or 14 for the polymerization or copolymerization of olefins.
- 17. (Currently amended) A process for the polymerization or copolymerization of olefins, which comprises polymerizing an olefin in the presence of a catalytically active composition as claimed in claim 13 or 14 or copolymerizing at least two different olefins in the presence of a catalytically active composition as claimed in claim 13 or 14.
- 18. (Canceled).